In The Claims:

1. (Currently Amended) A method for locating a desired channel in a downstream signal comprising the steps of:

scanning the downstream signal at a first scanning bandwidth in a power spectrum scan to identify power containing regions in the downstream signal;

scanning the identified power containing regions in the downstream signal at a second scanning bandwidth with a spectrum scan;

identifying potential desired channels based on the spectrum scan and generating ~~to generate~~ a constructed channel response;

processing the constructed channel response to generate a prospective channel list; and

checking the prospective channel list to find the desired channel,

wherein second scanning bandwidth is narrower than the first scanning bandwidth.

2. (Cancelled)

3. (Currently Amended) A method in accordance with Claim 1 wherein the first scanning bandwidth is ~~coarse power spectrum scan has an increment that corresponds to a downstream physical layer bandwidth of~~ about 6-8 MHz.

4. (Cancelled)

5. (Currently Amended) A method in accordance with Claim 1 wherein the step of scanning the down stream signal and the step of scanning the identified power containing regions uses a single filter ~~scanning the downstream signal comprises a relatively finer increment power spectrum scan~~.

6. (Currently Amended) A method in accordance with Claim 5 [[1]] wherein a bandwidth of the filter is reduced prior to the step of scanning the identified power containing regions ~~scanning the downstream signal comprises performing at least one spectrum analysis operation.~~

7. (Currently Amended) A method in accordance with Claim 1 [[6]], wherein the spectrum scan uses ~~analysis operation comprises~~ a fast Fourier transform.

8. (Original) A method in accordance with Claim 1, wherein the prospective channel list is checked with a QAM lock algorithm.

9. (Original) A method for locating a desired channel in a downstream signal comprising the steps of:

identifying power containing regions of the downstream signal with a relatively coarse power spectrum scan wherein each step of the scan covers about a 6-8 MHz portion of the downstream signal;

performing a relatively finer power spectrum scan on the power containing regions of the downstream signal to generate a constructed channel response of the power containing regions;

processing the constructed channel response of the power containing regions to generate a prospective channel list; and

checking the prospective channel list with a QAM lock algorithm until the desired channel is identified.

10. (Original) A method for locating a desired channel in a downstream signal comprising the steps of:

identifying power containing regions of the downstream signal with a relatively coarse power spectrum scan wherein each step of the scan covers about a 6-8 MHz portion of the downstream signal;

performing a Fourier analysis on the power containing regions of the downstream signal to generate a constructed channel response of the power containing regions;

processing the constructed channel response of the power containing regions to generate a prospective channel list; and

checking the prospective channel list with a QAM lock algorithm until the desired channel is identified.